Claims

1. An energy-absorbing case (4) for a motor vehicle bumper beam (2) comprising a casing consisting of a hollow section piece which has a first end able to be attached to the bumper beam (2) and a second end able to be fixed to the end of a longitudinal longeron (6) of the motor vehicle, characterized in that the casing is filled with a metal foam with energy-absorption properties, the density of which is between 0.1 and 0.4 g/cm^3.

2. The energy-absorbing case as claimed in claim 1, characterized in that the hollow section piece has a rectangular, particularly square, cross section.

3. The energy-absorbing case as claimed in claim 1, characterized in that the hollow section piece has a circular cross section.

4. The energy-absorbing case as claimed in one of claims 1 to 3, characterized in that the hollow section piece is made of aluminum.

5. The energy-absorbing case as claimed in one of claims 1 to 3, characterized in that the hollow section piece is made of steel.

6. The energy-absorbing case as claimed in one of claims 1, 2, 4 and 5, characterized in that the hollow section piece has a square cross section with a side length (a) of between 50 mm and 80 mm.

7. The energy-absorbing case as claimed in any one of claims 1 to 6, characterized in that the length (L) of the hollow section piece is between 80 mm and 200 mm.

8. The energy-absorbing case as claimed in one of claims 1 to 7, characterized in that the thickness (e) of the hollow section piece is between 1.5 mm and 3 mm.